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Claim 4. (Twice Amended) [A] The plant as claimed in claim 3, wherein the electric machine includes a core comprising [the flux paths in the core of the magnetic circuit consist of] laminated sheet of at least one of [and/or] cast iron [and/or], powder-based iron, and[or] rough forge iron.

Claim 5. (Twice Amended) [A] The plant as claimed in claim 1 wherein the winding comprises a cable and the solid insulation covering comprises inner and outer [is built up of a cable intended for high voltage comprising one or more current-carrying conductors surrounded by at least two] semiconducting layers and an intermediate insulating layer[s] of solid insulation surrounding the conductors.

Claim 6. (Twice Amended) [A] The plant as claimed in claim 5, wherein the inner[most] semiconducting layer is at substantially the same potential as the conductors [conductor(s)].

Claim 7. (Twice Amended) [A] The plant as claimed in claim 5, wherein [one of] the outer semiconducting layer[s is arranged to form essentially] forms an equipotential surface surrounding the conductors [conductor(s)].

Claim 8, line 1, delete "A" and insert --The--.

Claim 9, line 1, delete "A" and insert --The--.

Claim 10, line 1, delete "A" and insert --The--.

Claim 13, line 1, delete "A" and insert --The--.

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Claim 14. (Twice Amended) [A] The plant as claimed in claim 1 [wherein its] including a stator [is] cooled at earth potential by means of a fluid [flow of gas/or liquid].

Claim 15. (Twice Amended) [A] The plant as claimed in wherein the outer[most] semi-[conductor] conducting layer is connected to earth potential.

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Claim 16. (Amended) [A] The plant as claimed in claim 1, wherein the electric machine includes a rotor [is] inductively connected to the high voltage.

Claim 17, line 1, delete "A" and insert --The--.

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Claim 18. (Twice Amended) [A] The plant as claimed in claim 17, wherein the electric machine includes a stator having a stator winding [is carried out with] formed as at least one of an integral slot winding, and a fractional slot winding.

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Claim 20. (Twice Amended) [A] The plant as claimed in claim 18, wherein the stator has a pole pitch and the winding is [coils in the stator winding are] distributed and [have] includes a coil having a coil span different from the pole pitch.

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Claim 22. (Twice Amended) [A] The plant as claimed in claim 5 [the cables with solid insulation have] wherein the cable has a conductor area of about between 40 and 3000 mm² and [have] an outer cable diameter of about between 20 and 250 mm.

Claim 23, line 1, delete "A" and insert --The--.

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Claim 24. (Twice Amended) [A] The plant as claimed in claim 1, wherein the electric machine [generator] is designed for high voltage and arranged to supply the out-going electric network directly without any intermediate connection of a transformer.

Claim 25. (Twice Amended) [A] The plant as claimed in claim 1, comprising [several] a plurality of electric machines [generators], each of which lacks an individual step-up transformer, but which, via a system transformer common to the electric machines [generators], is connected to the transmission or distribution network.

Claim 26. (Twice Amended) [A] The plant as claimed in claim 24, wherein at least one electric machine [generator] is earthed via an impedance.

Claim 27. (Twice Amended) [A] The plant as claimed in claim 24, wherein [at least one generator] electric machine is directly earthed.

Claim 28. (Twice Amended) [A] The plant as claimed in claim 24, wherein [it is designed to be driven] said plant is operative as at least one of a pump and turbine station, the electric machine being arranged to function as at least one of a motor driven directly from the [electric power] transmission or distribution network and as a generator, generating voltage for the [electric power] transmission or distribution network.

Claim 29. (Twice Amended) [A] The plant as claimed claim 24, wherein the electric machine [generator] is arranged to generate power to various voltage levels.

Claim 30. (Twice Amended) [A] The plant as claimed in claim 29, wherein at least one electric machine includes a separate auxiliary winding for producing auxiliary power at one of said voltage levels [is arranged to generate auxiliary power and that the auxiliary power is arranged to be generated from a separate winding in the generator].

Claim 31. (Twice Amended) [A] The plant as claimed in claim 1, [wherein all the components are earthed to the same] including a common earth system.

Claim 32. (Twice Amended) [A] The plant as claimed in claim 1, wherein the winding of the electric machine [generator is arranged] is operable for self-regulating field control and lacks auxiliary means for control of the field.

Claim 33. (Twice Amended) A procedure for constructing a plant as claimed in claim 1, wherein the electric machine includes a stator [of the generator is delivered in parts to the plant site, said parts] comprising at least one of separate stator limitations and[/or] combined stacks of stator laminations, [after which] said parts [are] being assembled on site, and [in that both] threading of the winding and any splicing [required are performed] on site.

Claim 34. (Twice Amended) An electric generator for high voltage included in a hydro-generator plant in which the generator is coupled to a turbine via shaft means, said generator

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comprising at least one winding including a conductor, [the generator is provided with] a solid insulation covering including an insulating layer and at least one semiconducting layer surrounding said conductor and [in that] wherein each winding is [arranged to be directly connected via coupling elements] directly connectable to a high voltage transmission or distribution network [having a voltage of between about 20 and 800 kV].

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Claim 37. (Amended) A hydrogenerator plant including a rotating high voltage electric machine comprising a stator; a rotor and a winding, wherein said winding comprises a cable including [at least one] a current-carrying conductor and a magnetically permeable, electric field confining cover surrounding the conductor, said cable forming at least one uninterrupted turn in the corresponding winding of said machine, and wherein the conductor includes a plurality of insulated conductive strands and at least one uninsulated electrically conductive strand in contact with the cover.

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Claim 41. (Amended) The hydrogenerator plant of claim 37, wherein the cover is formed of a plurality of integrally bonded layers [including an insulating layer], and wherein said plurality of layers are substantially void free.